

**Amendments to the Drawings.**

None.

**REMARKS/ARGUMENTS**

Claims 1-22 are pending. Claims 1, 10, and 11 are independent claims. The remaining claims depend, directly or indirectly, from the independent claims. All of the claims are rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Application Publication Number 2003/0035619 A1, in the name of Pfeiffer (hereinafter “Pfeiffer”). Applicant disagrees with the rejections for the reasons set forth below.

**Claim 1.**

Claim 1 recites an optical system, comprising:

an optical transmitter configured to transmit information over at least one channel, each channel being at a different wavelength;

an optical filter including a band filter configured to filter at least one optical channel and a periodic filter configured to receive, filter, and shape the at least one optical channel from said band filter and provide a single filtered, shaped optical channel; and

an optical receiver positioned proximate the optical filter in the network and configured to receive at least the single filtered shaped optical channel.

Claim 1 was rejected with reference to Fig. 1 and paragraph [0014] of Pfeiffer. Fig. 1 of Pfeiffer discloses filters F1 and F2 cascaded in sequence. However, unlike claim 1 of the present application, Fig. 1 of Pfeiffer fails to teach or suggest “a band filter configured to filter at least one optical channel and a periodic filter configured to receive, filter, and shape the at least one optical channel from said band filter and provide a single filtered, shaped optical channel”. In contrast, Fig. 1 of Pfeiffer teaches the use of two filters, both having periodic filter characteristics. *See*, for example, Pfeiffer at paragraph [0013] which states:

The first and second optical filters are both implemented, for example, as filters with periodic transmission functions ... .

and Pfeiffer at paragraph [0025] which states:

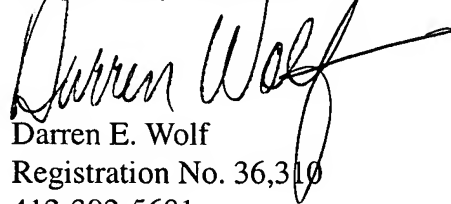
The optical filters F1 and F2 are, for example, both implemented as filters with periodic transmission functions ... .

Conclusion.

For the reasons set forth herein, Applicant submits that all claims are in condition for allowance and Applicant respectfully requests that the rejections in the Action be withdrawn and that the application be passed to allowance. If the Examiner has any questions pertaining to this Response or to the subject matter of the present application, the Examiner is encouraged to contact the undersigned.

Applicant believes that no fees are due with this Response. However, in the event fees are due with this Response, the Commissioner is hereby authorized to debit such fees from Charge Account Number 50-3198, in the name of Dickie, McCamey & Chilcote.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Darren Wolf", with a long horizontal flourish extending to the right.

Darren E. Wolf  
Registration No. 36,310  
412-392-5681

Therefore, Applicant submits that Pfeiffer teaches away from the present invention by teaching a system having cascaded periodic filters, as opposed to the combination of band filter and periodic filter recited in claim 1 of the present invention.

This difference is important because, as stated in the present application near the end of paragraph [0083],

The use of the periodic filter 83 following the band filter eliminates the need for a band filter that is precisely controlled to align with the signal channel spectrum, and the periodic filter 83 can be used anywhere in the spectral range of the periodic filter 83.

Therefore, Fig. 1 of Pfeiffer and the associated text fails to teach at least “a band filter configured to filter at least one optical channel and a periodic filter configured to receive, filter, and shape the at least one optical channel from said band filter and provide a single filtered, shaped optical channel” as recited in claim 1 of the present invention and, therefore, fails to teach the advantages of the present invention as set forth above.

Therefore, Applicant submits that Pfeiffer fails to teach at least one element recited in independent claim 1. Accordingly, Applicant submits that claim 1 is in condition for allowance.

Independent Claims 10 and 11.

Independent claims 10 and 11 recite limitations analogous to those discussed above with regard to claim 1. Therefore, for at least the reasons set forth hereinabove, Applicant submits that independent claims 10 and 11 are also patentable over Pfeiffer.

Claims 2-10 and 12-22.

Claims 2-10 and 12-22 depend, directly or indirectly, from independent claims 1, 10 and 11. Therefore, for at least the reasons set forth hereinabove with regard to independent claims 1, 10, and 11, Applicant submits that dependent claims 2-10 and 12-22 are patentable over Pfeiffer.